

Listing of Claims:

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[]].

Claim 1 (Currently Amended). For use with an optical microscope, a stage assembly mountable on an optical microscope for orienting a sample into a desired focal position comprising:

an X-axis plate operable for rectilinear shifting in the X-axis direction;

a Y-axis plate mounted on the X-axis plate operable for rectilinear translation in the Y-axis direction;

a Z-axis plate mounted on the XY plate assembly for carrying a sample to be investigated; and

a piezoelectric actuator mechanism interposed between the XY plate assembly and the Z-axis plate operable for rectilinear translation **of the Z-axis plate, wherein the X-axis, Y-axis, and Z-axis plates each includes an internal opening configured to allow passage of transmitted light and viewing of the sample by an objective lens of the optical microscope.**

Claim 2 (Original). The stage assembly of claim 1 wherein the piezoelectric actuator mechanism includes three spaced-apart portions for engaging the Z-axis plate.

Claim 3 (Original). The stage assembly of claim 1 wherein the X-axis plate, Y-axis plate and Z-axis plate are arranged to locate the sample in proximity to the design focal position of the microscope.

Claim 4 (Original). The stage assembly of claim 2 wherein the piezoelectric actuators are mounted on the Y-axis plate and engage the Z-axis plate.

Claim 5 (Original). The stage assembly of claim 4 wherein the three spaced-apart piezoelectric actuators are operable to rectilinearly translate the Z-axis plate along the Z-axis direction in increments of less than 0.05 micrometers.

Claim 6 (Original). The stage assembly of claim 1 wherein the Z-axis plate is mounted on the XY plate assembly for travel therewith.

Claim 7 (Currently amended). A method for use with an optical microscope to facilitate focusing of an image comprising:

providing an XY plate assembly including an X-axis plate rectilinearly translatable in the X-axis direction and a Y-axis plate mounted thereon rectilinearly translatable in the Y-axis direction;

positioning a Z-axis plate on the XY assembly and mounting a sample on the plate, wherein the X-axis, Y-axis, and Z-axis plates each includes an internal opening configured to allow passage of transmitted light and viewing of the sample by an objective lens of the optical microscope; and

rectilinearly translating the Z-axis plate along the Z-axis for bringing the sample into focus.

Claim 8 (Original). The method of claim 7 wherein the rectilinear translation of the Z-axis plate includes the step of engaging the Z-axis plate with a piezoelectric mechanism.

Claim 9 (Original). The method of claim 8 wherein the step of engaging the Z-axis plate is accomplished by piezoelectric actuators interposed between the XY plate assembly and the Z-axis plate.

Claim 10 (Original). The method of claim 7 wherein the step of mounting the sample includes mounting a slide insert on the Z-axis plate with the sample held thereby.